Chapter 1
Introduction and Summary

Introduction

The *Josephine County Rural Transportation System Plan* (TSP) establishes the county's goals, policies and action strategies for developing the transportation system outside of the Grants Pass and Cave Junction Urban Areas. The TSP is intended to serve as a blueprint or master plan to guide transportation decisions to address both short and long term needs. The TSP discusses on-going roadway maintenance needs, and identifies improvements to enhance roadway safety, non-motorized travel (bicycles and pedestrians), and public transit service, and to accommodate future land development activity, particularly in the Murphy and Merlin areas.

The *Josephine County Rural TSP* addresses Oregon Statewide Planning Goal 12 and the Oregon Transportation Planning Rule (TPR). The TPR directs cities and counties to develop balanced transportation systems addressing all modes of travel including motor vehicles, transit, bicycles and pedestrians. The TPR envisions development of local plans that will promote changes in land use patterns and transportation systems that make it more convenient for people to walk, bicycle, use transit, and drive less to meet their daily needs.

The TSP development process was initiated in October 2002. The plan development process consisted of six main steps:

- Setting overarching goals and objectives,
- Analyzing existing conditions,
- Assessing future needs,
- Evaluating future alternatives,
- Creating a Draft TSP document and code revisions, and
- Finalizing the TSP.

Finally, the *Josephine County Rural Transportation System Plan* must reflect the transportation system that best serves the needs of residents and other users of the transportation system within the rural portion of the county. The plan must also provide a range of transportation options, and allow for the balancing of state and local transportation objectives. To do so, this plan must:

- Identify and support the values of the County regarding transportation and land use;
- Incorporate local citizen participation in the transportation planning process;
- Ensure consistency with the *Oregon Transportation Plan*, and be coordinated with federal, state and local agencies, as well as local transportation service providers; and
- Provide a framework for transportation-related decisions.

Public, Agency and Stakeholder Involvement

As noted above, the process for preparing the *Josephine County Rural Transportation System Plan* must incorporate local citizen participation, be coordinated with local transportation service providers, and be coordinated with federal, state and local agencies. This requirement was satisfied through a comprehensive process with the following components:

Stakeholder Interviews. At the very beginning of the planning process, representatives from Federal, State and local government agencies and persons from private business interests were interviewed by Josephine County staff and asked for their input on transportation system issues, needs and concerns. This input helped shape the issues discussed with the Citizens Advisory Committee and Technical Advisory Committee, discussions which led to the development of overarching goals and objectives for this plan.

Citizens Advisory Committee. A Citizens Advisory Committee (CAC) with representatives of a broad cross-section of transportation system users and other transportation providers was formed to provide input and guidance to the plan development process. The CAC addressed the goals and objectives for the TSP, discussed the general needs for each mode of transportation, and reviewed improvement strategies and potential scenarios and alternatives. Meetings of this group were held throughout the planning process. A listing of CAC membership and affiliations is provided in an appendix to this document.

Technical Advisory Committee. A Technical Advisory Committee (TAC) with representatives of federal, State, County and local agencies was formed to provide input and guidance to the planning process. The TAC included a focus on technical and interagency issues, as well as helping establish the goals and objectives, improvement strategies and recommendations. Meetings of this group were held throughout the planning process. A listing of TAC membership and affiliations is provided in an appendix to this document.

Communications. Two newsletters were prepared to inform Josephine County residents about the process for developing the Rural Transportation System Plan, and how to get involved. These newsletters were mailed to Josephine County residents, distributed through electronic media or otherwise made available to rural county residents. In addition, information regarding the plan, major milestones and opportunities for public involvement was posted on the County's website.

Open Houses. Open houses were held in a variety of locations throughout the county in May and December, 2003. The initial set of open houses addressed existing conditions and future needs, and gathered input on transportation issues. The second set of open houses provided an opportunity for education and input regarding the draft transportation system plan.

Planning Commission Work Sessions. Two work sessions were held with the Josephine County Rural Planning Commission. The September, 2003 work session presented an overview of the process to-date and the evaluation of plan alternatives, and resulted in a recommendation of a preferred alternative for further refinement. The November, 2003 work session presented the draft *Rural Transportation System Plan* for approval to take to the second round of public open houses.

Public Hearings. Public hearings will be scheduled before the Rural Planning Commission and Board of County Commissioners in Winter and Spring, 2004.

The following section provides a summary of the major goals and objectives of the *Josephine County Rural Transportation System Plan*.

Goals and Objectives

As noted in the Introduction, the *Josephine County Rural Transportation System Plan* must identify and support the values of the County regarding transportation and land use. The adopted *Josephine County Comprehensive Plan*, a plan prepared with substantial public and stakeholder involvement, served as the foundation for the *Rural Transportation System Plan* with regard to land use.

With regard to values concerning transportation, the stakeholder interviews conducted at the front end of the planning process provided an initial indication of key transportation issues. These issues were reviewed with the TSP Citizens Advisory Committee and Technical Advisory Committee, and a list of overall principles to guide development of the transportation system plan was developed. These guiding principles were then incorporated into a draft set of overarching goals and objectives for the *Josephine County Rural Transportation System Plan*, and were subsequently reviewed and approved by the CAC, the TAC, and the County Board of Commissioners. These overarching goals and the objectives for achieving them are listed below. These goals and objectives were used to guide development of the key recommendations and policy directives established for each travel mode in the TSP. Specific policies and recommendations to implement these goals and objectives are presented in the chapters for each mode. Goals, objectives, policies and recommendations are also summarized in Chapter 13 of the TSP.

The overarching goals and objectives for the *Josephine County Rural Transportation System Plan* are provided below. Goals are numbered and the supporting objectives are listed below each goal.

Goal 1: Improve safety for all transportation modes.

- *Objective 1 - Ensure the transportation system is planned to maximize safety.*

Goal 2: Provide for a transportation system that is accessible, efficient and practical.

- *Objective 1 - Increase mobility and access options for Josephine County citizens.*
- *Objective 2 - Facilitate movement of goods into and out of the County.*
- *Objective 3 - Enhance freight mobility (by rail, truck and air) and intermodal transfer.*
- *Objective 4 - Address changing characteristics of trucking, aviation and rail industries.*

Goal 3: Provide sufficient capacity within the transportation system to accommodate future demand.

- *Objective 1 - Satisfy Transportation Planning Rule requirements for system capacity and for encouraging the use of alternative modes of transportation.*
- *Objective 2 - Maximize transportation system capacity through the use of facility improvements, Transportation Demand Management actions, Transportation System Management actions, appropriate IVHS and other appropriate tools and techniques.*
- *Objective 3 - Encourage alternative modes of transportation by providing for a choice in modes.*

Goal 4: Review and update roadway classifications as necessary.

- *Objective 1 - Provide coordinated design standards for all modes of transportation.*
- *Objective 2 - Satisfy Transportation Planning Rule requirements for system planning.*
- *Objective 3 - Consider land use and transportation plans/solutions simultaneously in determining roadway classification and hierarchy.*
- *Objective 4 - Provide appropriate transitions between regional, urban and rural transportation facilities.*

Goal 5: Provide system connections as needed to improve efficiency and access and to improve circulation.

- *Objective 1 - Accommodate projected growth with improvements to the roadway network and increased options for choosing a mode of transportation.*
- *Objective 2 - Achieve greater mobility between communities, activities and land uses.*
- *Objective 3 - Achieve improved connectivity between modes of transportation.*

Goal 6: Consider and implement land use and transportation plans/solutions simultaneously in all planning activities.

- *Objective 1 - Provide for the consideration of the interrelationships and connections between transportation and land use in future planning.*
- *Objective 2 - Ensure that transportation improvements meet the needs of rural land uses, consistent with the Transportation Planning Rule.*

Goal 7: Ensure an effective strategy for intergovernmental coordination in transportation planning.

- *Objective 1 - Maintain coordination with multiple jurisdictions.*
- *Objective 2 - Provide compatible design standards for all modes of transportation.*
- *Objective 3 - Work to achieve a balance between business and economic development and preservation of the functional capacity of the transportation system when coordinating transportation planning with other jurisdictions.*

Goal 8: Provide a plan document that is meaningful and useful to all stakeholders.

- *Objective 1 - Prepare the plan at an easy-to-understand level, with a concise action plan and a list of needed follow-up tasks and/or refinement studies.*
- *Objective 2 - Develop a long-term public involvement process to ensure that the public is informed of and involved in the actions of multiple service providers in order to better coordinate transportation system decision making.*

Goal 9: Consider funding issues in planning a future transportation system.

- *Objective 1 - Identify a range of methods for funding recommended actions and improvements.*
- *Objective 2 - Ensure cost-effective investment in transportation. Improvements should be fiscally responsible, economically efficient and realistic.*
- *Objective 3 - Extend usable life of existing facilities*
- *Objective 4 - Ensure the plan provides for the maintenance of existing and planned improvements.*
- *Objective 5 - Achieve a balance between public and private sector interests when considering potential new funding sources for transportation improvements.*

Goal 10: Plan for a transportation system that is environmentally responsible.

- *Objective 1 - Provide for choice with regard to the use of alternative modes of transportation.*
- *Objective 2 - Ensure that transportation decisions and facility design standards consider environmental requirements and minimize impacts to the natural and built environment.*

Key Issues and Recommendations

The on-going operations, maintenance and improvement of the rural transportation system in Josephine County is facing two significant challenges. Not only is the existing rural road and bridge system getting older and being used more heavily (most of these facilities are over 60 years old), but the County is currently experiencing sharply declining transportation revenues to maintain and preserve that system.

Use of the rural roadway system has increased over the past several years as the County has continued to grow. While much of this system currently appears to be in good condition, a significant percentage of these roads (estimated at about ¾ of the entire system) consist of an original pavement over dirt with a number of successive overlays. These roads have little or no structural support underneath the surface pavement. Heavy loads and/or frequent traffic will cause these roads to deteriorate rapidly without regular, routine pavement maintenance activities. In addition, a number of County bridges have also been

identified as structurally deficient and need to be replaced, similar to the cracked bridges problem currently being experienced by ODOT on the state highway system.

At the same time, the County is experiencing a significant decline in revenues available for routine transportation system maintenance. For example, in 1991 the County Public Works Department operated with an $11.4 million annual budget. With this budget, the County provided numerous routine maintenance services including chip sealing (to protect the roadway pavement surface), vegetation management, ditch clearing, sign repair/replacement, roadway striping/restriping, guardrail repair, roadway cleaning, and many other activities. By 2004, the County's Public Works Department budget had been reduced to $9.7 million. When the effect of inflation is considered, this $9.7 million budget will actually buy only $6.2 million worth of the services that were provided in 1991 – a decline in effective revenue of 36 percent.

In addition, timber receipts currently provided by the US Forest Service for roadway maintenance will no longer be available to the County after 2006. In the past, this program has been used to assist the county by providing compensation for the loss of timber harvests and for the large proportion of local land owned by the State and Federal governments (and thus not subject to local taxation). If the timber receipts program is not continued (and this will require an act of Congress), the loss of this revenue source will further reduce the County's budget for the roadway system by approximately one-third.

Clearly, the County is facing a significant decline in its ability to maintain its roadway system. As maintenance continues to be deferred, the cost of preserving roadways will go up. For example, every $1.00 that is spent in preventative maintenance for a road that is in generally good condition will cost $4.00 to $5.00 if the road is allowed to deteriorate to a poor condition. Currently it costs approximately $9,000 per mile to provide all necessary routine maintenance services. It costs $750,000 per mile to rebuild a road that has deteriorated beyond the kind of repairs provided by on-going and regular maintenance. On a scale of 5 (very good) to 1 (very poor), a broad assessment indicates that the County's road system should rank at 3.5 and this ranking is dropping.

The Rural Josephine County TSP includes several recommendations related to roadway maintenance. The TSP includes no new construction projects but is focused on returning the roadway maintenance program to a sustainable level that provides for the long-term preservation of the system at the least cost. The Plan also identifies the need for several bridge repair/replacement projects, some modest improvements at high accident or other high risk locations, and a limited number of improvements focused on areas with congestion or opportunities for economic development.

The organizational structure of the TSP document is described on the following pages. More detailed information about specific needs, conclusions and recommendations is provided in Chapters 2 through 13.

TSP Elements

The *Josephine County Rural TSP* addresses all travel modes currently available to move people and goods within or through those portions of the County that lie outside of the Grants Pass and Cave Junction Urban Areas. The transportation modes examined in this document include:

- Motor vehicles (including autos and trucks)
- Public transit,
- Other surface transportation (including intercity bus, rail, and pipelines),
- Air transportation,
- Non-motorized transportation (including walking and bicycling), and
- Freight mobility

The TSP is organized into thirteen chapters beginning with this Introduction. Other chapters include the following:

- Previous work/background studies,
- Existing conditions,
- Future transportation system demand,
- Development and evaluation of TSP alternatives,
- Street plan,
- Freight plan,
- Public transit plan,
- Transportation system management/transportation demand management plan,
- Air transportation plan,
- Non-motorized transportation plan,
- Rail plan, and
- Plan implementation strategy.

Information presented and the key issues discussed in each chapter is summarized in the following paragraphs.

Previous Work/Background Studies

The TSP begins with an overview of existing plans, studies and policy guidelines that are relevant to the development of a transportation plan for the rural portion of Josephine County. This review is intended to ensure that the County's TSP reflects and is consistent with state transportation planning policies and standards, and is coordinated with the plans of other local jurisdictions (e.g., Grants Pass and Cave Junction). Transportation planning requirements as articulated by the State of Oregon's Transportation Planning Rule (TPR) and other statewide transportation planning documents and programs are first summarized, followed by an overview of existing transportation plans and policies from the County and its cities.

Existing Conditions

An inventory and evaluation of the County's existing rural transportation system was conducted to identify opportunities and constraints, and to provide the basis for developing short-range improvement recommendations. This rural transportation system includes Merlin, Murphy, Hugo, Sunny Valley, Wolf Creek, several small communities in the Illinois Valley outside of Cave Junction, and other locations. Inventory information was obtained from the 1982 *Josephine County Roadway Plan*, the 1982 *County Bicycle Master Plan*, street data maintained by the County Public Works Department, transit information from Josephine County Transit, highway data maintained by ODOT, and other information from various service providers and facility managers. System inventory and existing operations for the unincorporated area within the Grants Pass and Cave Junction urban areas are addressed in the TSPs for these cities.

The transportation system inventory includes:

- Existing street characteristics including physical features, traffic control, current traffic operations and safety with primary emphasis on the arterial and collector street systems

- Freight transportation systems including trucking and pipeline transportation (there is no water-based transportation in Josephine County)

- Public transit including intercity and dial-a-ride bus service

- Transportation system management and transportation demand management
- Air transportation
- Pedestrian and bicycle systems
- Rail transportation

Future Transportation System Demand

This chapter describes the development of future traffic forecasts on the rural road system in Josephine County. These forecasts are based on projections of future population and socio-economic growth within the county, with a particular focus on the rural areas. Included in the chapter is a discussion of recent population and employment growth, future population and employment growth expectations to the planning horizon year of 2025, and future estimates of traffic volumes along the major roadways in the rural portion of the county.

Development and Evaluation of TSP Alternatives

This chapter discusses the process used to develop and evaluate TSP alternatives. This process began with the identification of five distinct scenarios that approach improvement of the transportation system with an emphasis on varying priorities or "themes". These thematic scenarios include:

- No build - based on existing revenue and/or previously committed projects such as those currently in the State Transportation Improvement Program). For county roads this was largely a maintenance-only scenario that was severely limited in scope by inadequate revenue sources. This scenario would result in a steadily deteriorating system of roads and highways in the rural portion of the County due to the declining amount and value of the revenue received.

- Maintenance - emphasized a focus on "expanded" roadway maintenance to a level that would curtail the trend toward increased deterioration by providing additional revenue sufficient to maintain the County's roadways at their current levels. This scenario also included general "targeted" or significant major maintenance projects including repair/replacement of several deficient bridges.

- Safety - focused on implementation of projects that respond to existing high accident locations and areas of potential safety risk).

- Mobility and Accessibility - included projects that are intended to expand the existing multimodal transportation system by responding to existing and projected future congestion problems, and augmenting existing transit service)

- Economic Development - focused on specific improvement projects that would improve access to industrial or commercial property or expand recreational travel opportunities with the intent of encouraging job creation in the rural portions of the County).

The projects included in these scenarios were evaluated using criteria developed to support the draft goals and objectives of the TSP. The evaluation process resulted in a list of prioritized projects by type (e.g., consistent with the project groupings in each thematic scenario). These projects were then organized into tiered alternatives consistent with project priorities and levels of existing or potential funding. The Tiered Alternatives included:

- Tier 1 Alternative – consistent with the No Build scenario, this tiered alternative would be fully funded.

- Tier 2 Alternative – included the highest priority projects from each of the thematic scenarios. Implementation of this alternative would depend on the availability of new or additional transportation revenue above and beyond current sources and/or amounts. The Tier 2 Alternative has been identified as the Preferred Alternative for the TSP.

- Tier 3 Alternative – included the remaining, lower priority projects that respond to identified transportation system needs, problems and deficiencies. Significant addition revenue beyond the level identified for Tier 2 would be needed to implement these projects.

The next several chapters of the TSP focus on a discussion of the needs, improvement strategies, policy guidance, and recommendations for each transportation mode.

Street Plan

This chapter presents a discussion of existing and anticipated future (2025) roadway system needs and deficiencies, and highlights the development and evaluation of potential improvements. The policy context of street plan is presented first, followed by the results of projected future travel demand analysis including identification of improvement needs, a discussion of improvement strategies and alternatives, and ending with a street system action plan. The action plan includes general policy guidance for street system improvement and management, along with specific policy or improvement recommendations.

Freight Plan

Freight mobility is critical to maintain Josephine County's economic competitiveness, and is dependent on a number of transportation modes, including truck, air, pipeline and rail. This chapter addresses freight movement on the existing street and highway system, and for pipelines. Other travel modes that are important to the movement of goods and commodities are addressed in their respective chapters (e.g., air and rail transportation).

Public Transit Plan

This chapter presents a review of needs, deficiencies, policies and recommended actions affecting the provision of public transportation services in Josephine County. Included is a discussion of the local and state policy context for developing and enhancing this travel mode, evaluating the existing public transportation system, and making recommendations for rural Josephine County. Josephine County Transit (JCT) currently provides public transportation services in the county. Three alternatives, based on available funding, are offered for operating and enhancing public transportation in the county.

Transportation System Management/Transportation Demand Management Plan

Transportation System Management (TSM) and Transportation Demand Management (TDM) are terms used to describe a broad array of strategies, programs and technologies used to more effectively manage existing transportation resources and to potentially postpone or eliminate the need for major capacity-enhancing investments. The range of TSM and TDM strategies that may be applicable in rural Josephine County are presented and discussed in this chapter.

TSM strategies focus on measures that improve the efficiency of the existing transportation system. Such strategies include traffic signalization, removal of existing unwarranted traffic signals, signal synchronization to improve traffic progression, intersection channelization improvements, one-way streets, parking restrictions, turn prohibitions, and other similar actions. With only one traffic signal in

rural Josephine County and only a limited number of locations where traffic operational improvements are appropriate, the most applicable TSM strategies may be those that rely on Intelligent Transportation Systems (ITS) technologies. ITS strategies such as traffic cameras and variable message signs are currently in use at several locations on the state highway system and their use could be expanded.

TDM strategies and programs are aimed at reducing travel by single-occupant vehicle during peak travel periods, thus reducing the need for additional roadway capacity. TDM strategies include transit passes or other measures to increase transit use, carpools, vanpools, flexible work hours, a compressed workweek, telecommuting, videoconferencing, and other similar measures.

Air Transportation Plan

This chapter discusses the transportation system needs, deficiencies, policies and improvement options affecting access to the two public airports in Josephine County. These include the Grants Pass Airport near Merlin, and the Illinois Valley Airport that is located approximately four miles south of Cave Junction. Land use issues in the vicinity of these airports are also discussed.

Non-Motorized Transportation Plan

This chapter documents the review and assessment of needs, deficiencies, policies and improvement options affecting the bicycle and pedestrian transportation systems in rural Josephine County. In the rural area, bicyclists and pedestrians generally share the same facilities. Unlike urbanized areas – where bicyclists use designated lanes or wide shoulders, and pedestrians use sidewalks – rural facilities for non-motorized travel usually consist of wide shoulders and/or multi-use paths. As in most rural areas, bicycle/pedestrian needs are similar. Facilities that are deficient for one mode are usually deficient for the other, thus recommended improvements can benefit both modes. For these reasons, the discussion of needs and recommended improvements in this chapter apply to both the bicycle and pedestrian system.

This chapter includes an evaluation of needs and deficiencies in the existing systems, a discussion of improvement strategies for enhancing and expanding these systems, and an action plan for improvement. The action plan includes policy guidance along with specific project recommendations.

Rail Plan

This chapter describes the existing rail system in Josephine County and addresses issues with respect to freight rail service, the potential for future passenger rail service, and improvement needs at existing at-grade railroad crossing locations.

Plan Implementation Strategy

The last chapter of the TSP addresses those issues which are most pertinent to the long-term implementation of the policies and improvement recommendations contained in the document. This chapter begins with an overview of the policy guidance provided by the TSP in the form of goals and objectives. These goals and objectives are fleshed out by the policy and project improvement recommendations that follow. This chapter includes a discussion of transportation cost and revenue forecasts and identifies a significant revenue shortfall. This shortfall will require additional financial resources to implement any projects except for the most minimal (and inadequate) level of roadway maintenance. The chapter identifies and provides estimates of future revenue potential from a variety of additional transportation system funding sources. The chapter also includes a specific project list categorized into short-, medium-, and long-term timeframes, and concludes with a summary of the ordinances needed to implement the recommendations of the TSP. The funding and implementation plan included in this chapter provides a blueprint that makes it possible for the TSP's recommendations to become a reality.